



Lexington Solar Task Force

Board of Selectmen

February 24, 2014

The Solar Project has steadily advanced

- ✓ Q4 2012 - Completed preliminary technical and commercial due diligence.
- ✓ Q1/Q2 2013 - Proposed a change to Town By – Laws to enable purchase of Solar Electricity should the Town so choose.
 - Won the support of Selectmen key municipal committees and departments.
 - Won the support of Town Meeting
 - Warrant Article #29 was unanimously supported.



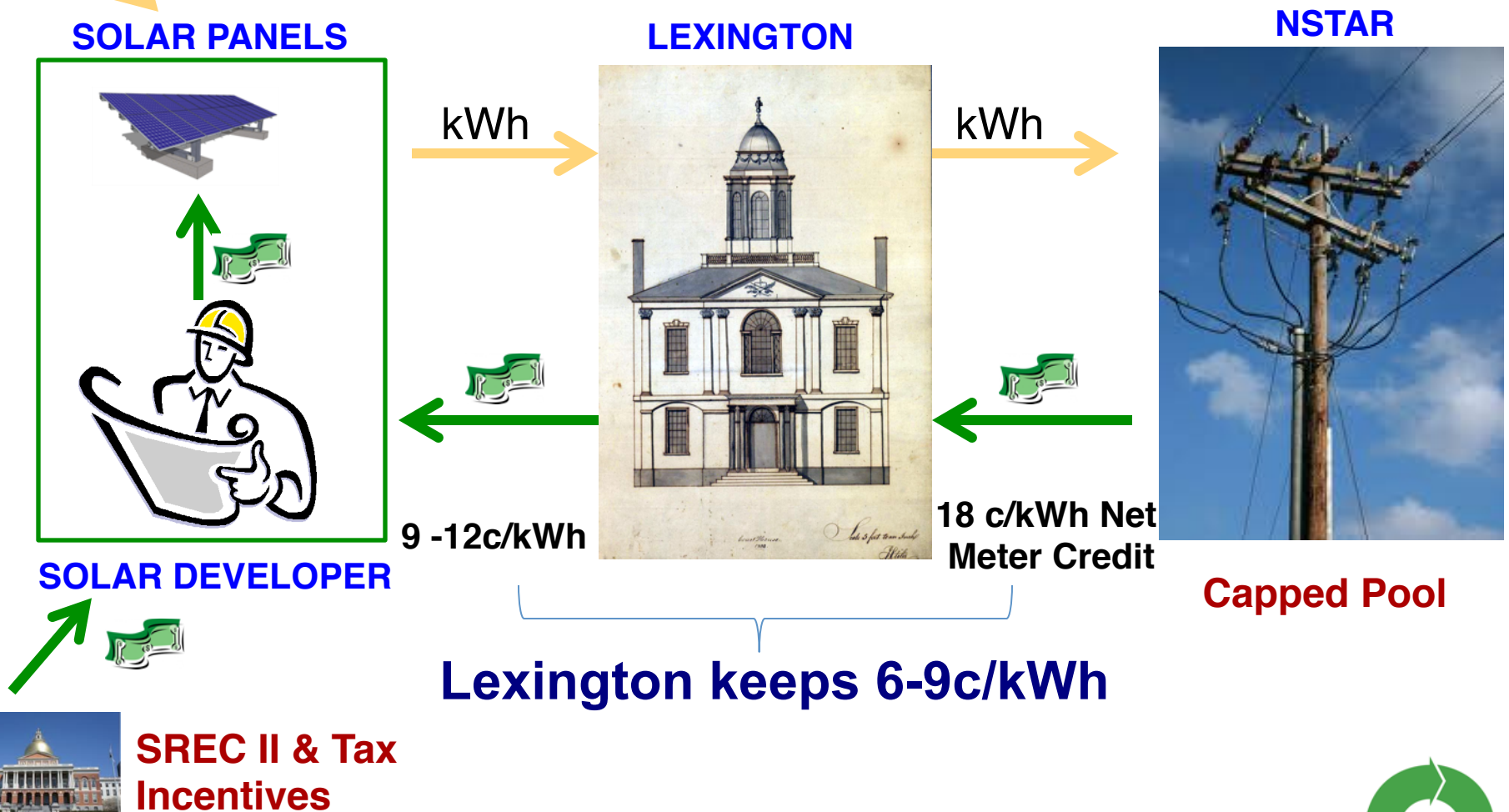
The Solar Project has steadily advanced

- ✓ Q2 2013 - Selectmen, School Committee and other Stakeholder Committees support proceeding with development of the Solar Proposal.
- ✓ Q3 2013 - Community information session held – broad support for the project.
- ✓ Q4 2013 - Cadmus consulting engaged to complete the RFQ process.
- ✓ Q1 2014 - Draft RFQ submitted to Town Manager and DOER for review.

→ Today - An update to the Board of Selectmen on the Solar Project seeking support for release of the Municipal Buildings and Composting Facility RFQs.

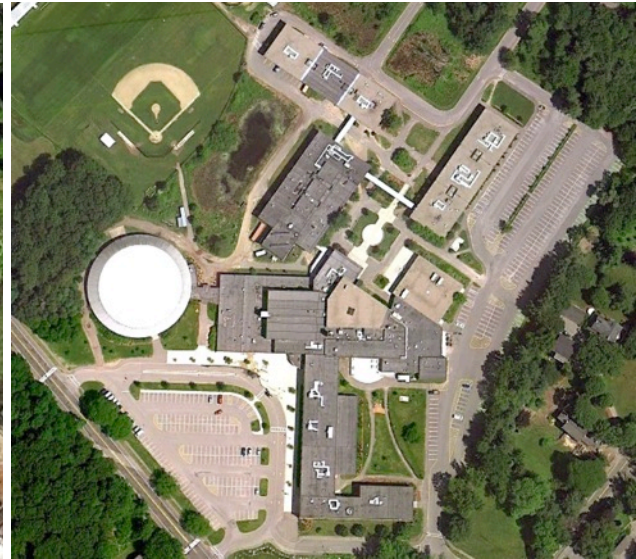


Economics = Zero Capital for positive cash flow



Potential Solar Sites include buildings and land

- Hadley Building & Garage
- Hartwell Avenue Composting Site
- School Buildings

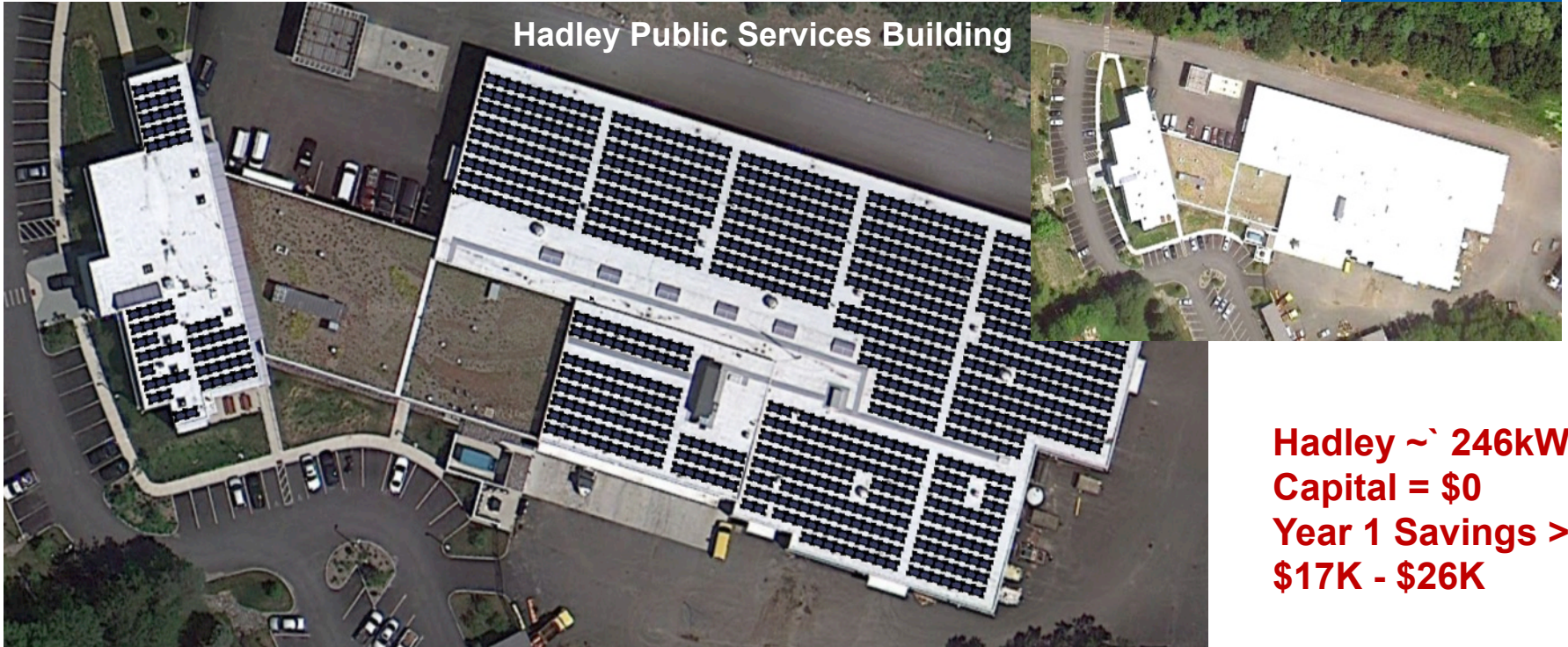


Preliminary economic analysis is strong

Partnering with DPF, we worked with a 3rd party owners agent to develop a preliminary technical and economic case.

CADMUS

Hadley Public Services Building



**Hadley ~ 246kW
Capital = \$0
Year 1 Savings >
\$17K - \$26K**

Extending across Town Property, Solar Potential ~ 2.6MW – 5.6MW



\$2 - \$14 million in 20 yr savings.....\$0 Capital

CO₂ reduced by 114 million lbs. or 404 cars off the road.



Market information needed to firm the proposal

- Working with Cadmus and the DPF / DPW it was decided that an RFQ (request of qualifications) was preferred over an RFP (request for proposal) to optimize timing for SREC II release expected in March.
- The RFQ is a tool to gather information to assist in the firming of the solar proposal and does not bind the Town in any way.
- The taskforce developed two RFQs. The first to assess the Solar Potential of the Municipal buildings. The second to evaluate the potential for the Hartwell composting site.



Market information needed to firm the proposal

- The RFQs were submitted for review to the Town Manager and the DOER.
 - Town Manager, procurement and legal counsel has completed review.
 - DOER reviewed and requested minor adjustment to wording.
 - Final DOER sign off received **today**, 02/24.
- A successful RFQ process will identify a shortlist of solar developers that the Town can then engage to validate key technical and economic assumptions.



Timeline is aggressive to deliver Solar in 2014

Step	Status	Timing
Town Manager / DOER Review of RFQs	Ongoing	Q1 2014
Selectman Approve Issuance of RFQs	Open	Q1 2014
Town Manager Issues RFQs / Published and Advertised	Open	Q1 2014
Town evaluation team formed	Open	Q1 2014
Site Visits / Responses Due	Open	Q1 2014
Vendor Interviews and Developer Selection	Open	04/ 2014
Recommendation to Town / School Committee	Open	05/ 2014
Economic Decision / Contract Executed	Open	06/ 2014
Construction Substantially Complete	Open	08/ 2014



Approval is sought to issue the RFQs

- The RFQs do not bind the Town in any way.
- With responses to the RFQs, the Town can engage contractors to firm the scope, economic, and technical assumptions critical to the Solar Proposal.
- Timeframes are critical due to
 - Consideration of regulatory incentives and
 - Consideration of construction duration and desire to have operating Solar in 2014.
- **The Solar Taskforce asks the Board of Selectmen to support issuance of the RFQs as soon as final DOER sign off is obtained.**



Q&A



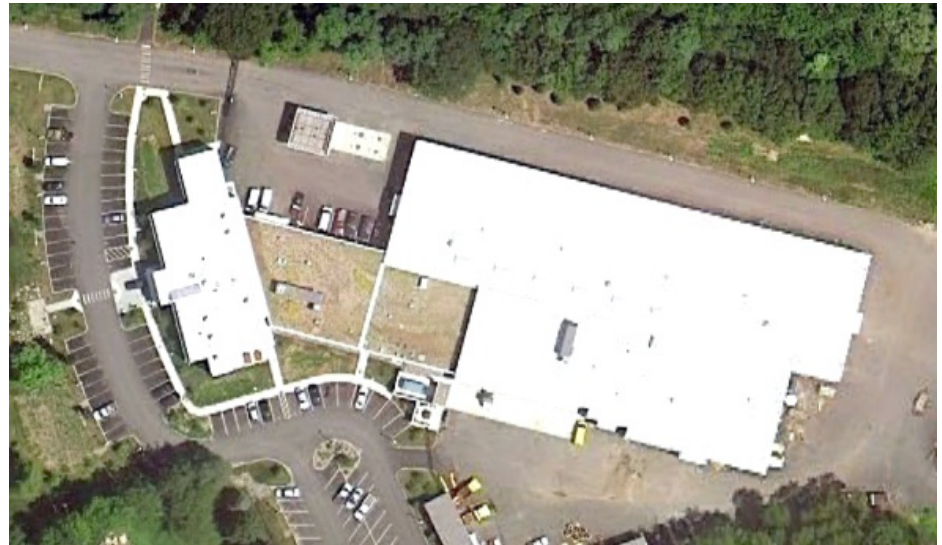
Lexington Solar Potential

Facility Name	Estimated System Size (kW)	Solar Energy Production (kWh)
Lexington High School	792	916,243
Diamond Middle School	306	355,368
Bridge Elementary School	302	351,845
Bowman Elementary School	294	341,115
Clark Middle School	252	290,505
Public Services Building	246	286,587
Harrington Elementary School	193	225,992
Fiske Elementary School	193	224,723
Estabrook Elementary School	TBD	TBD
Cary Library	66	75,493
Rooftop Total	2,642	3,067,871
Hartwell Ave Landfill	3,000	3,520,932
Grand Total	5,642	6,588,803



Hadley Building – Solar Potential

- Hadley is an outstanding solar site
 - Large white roof (56,000 ft² usable space)
 - 164° & 195° azimuth
 - 246 kW array
 - 287,000 kWh / yr
- Electricity demand
 - 403,000 kWh / yr



Hartwell Avenue Site

Excellent Solar Site

12 Solar Acres
NSTAR
Substation

3 MW Installation
3.5M kWh / Year

Positive Cash Flow*
\$4,000,000 -
\$6,000,000

*20 Years

